

## MICROBIOLOGICAL EVALUATION OF DRINKING WATER FROM CENTRALIZED AND SMALL COMMUNITY SUPPLY SYSTEMS IN KAUNAS REGION, LITHUANIA

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**Summary.** The aim of this study was to evaluate microbiological quality of drinking water from centralized and small community supply systems in Kaunas region, Lithuania. In total 1345 samples of drinking water were analyzed from both centralist and individual water supplies in 2004 – 2006. The results of our study showed that 94.4% of tested drinking water samples from centralized drinking water supply systems is of high microbiological quality and fulfill requirements of drinking water standard HN 24:2003.

Drinking water from dug wells is more often contaminated and does not fit drinking water standard requirements. We found that contamination of drinking water by coliforms, enterococci and *E. coli* exceeded microbiological requirements in 12.8 %, 23.4% and 16.7 % of tested samples respectively. Maximum number of *E.coli* and faecal enterococci, 4.22±0.85 and 3.14±0.90 cfu/100ml respectively, in drinking water from centralist water supply was detected in summer. Maximum number of coliforms- 1.12±0.02 cfu/100ml, in spring. The highest number of coliforms (5.04±2.66 cfu/100ml) in drinking water samples from individual water supplies was detected in summer. Whereas the highest contamination by *E.coli* and faecal enterococci was detected in autumn, 8.96±3.23 cfu/100ml and 8.02±2.56 cfu/100ml, respectively.

**Key words:** drinking water, microbiology, safety.